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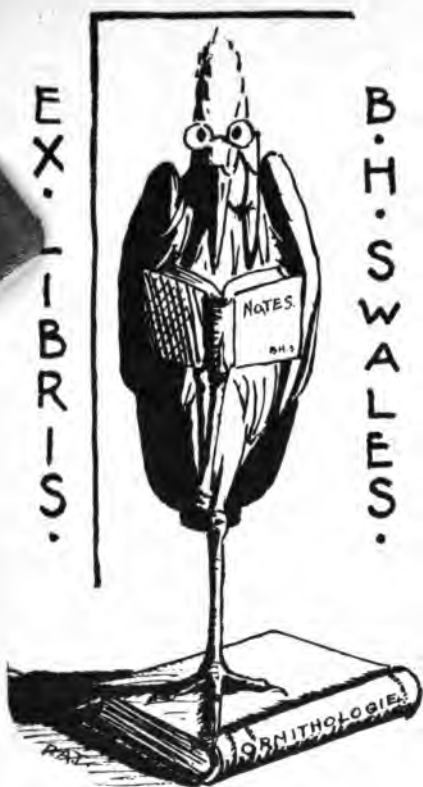
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ABBREVIATIONS

Acad., Academy.	Bot., Botany.
Agric., Agriculture.	Bryol., Bryology.
Am., American.	C., Collection.
Analyt., Analytical.	Carab., Carabidæ.
Anat., Anatomy.	Carb., Carboniferous.
Anth., Anthropology.	Ceram., Cerambycidæ.
Antiq., Antiquities.	Chem., Chemistry.
Arach., Arachinda.	Cicind., Cicindelidæ.
Arch., Archæology.	Cin., Cinnnati.
Ast., Astronomy.	Coleopt., Coleoptera.
Asst., Assistant.	Col., Collection.
Biol., Biology.	Coll., College.

NATURALISTS' DIRECTORY

Comp., Comparative.	Meteo., Meteorology.
Conch., Conchology.	Mic., Microscopy.
Crypt., Cryptogamic.	Min., Mineralogy.
Crystall., Crystallography.	Moll., Molluscs.
Crust., Crustacea.	Morph., Morphology.
Cur., Curator.	Mus., Museum.
Cytol., Cytology.	Nat. Hist., Natural History.
Devon., Devonian.	Neuropt., Neuroptera.
Dipt., Diptera.	Niag., Niagara.
Dir., Director.	Obs., Observatory.
Dist., Distribution.	Ool., Oology.
E. E., Electrical Engineer.	Ophthal., Ophthalmology.
Econ., Economic.	Org., Organic.
Elect., Electricity.	Orn., Ornithology.
Emb., Embryology.	Orthopt., Orthoptera.
Ent., Entomology.	Osteol., Osteology.
Esp., Especially.	Palæo., Palæontology.
Eth., Ethnology.	Pathol., Pathological.
Ethnog., Ethnography.	Phæn., Phænogamic.
Ex., Exchange.	Philol., Philology.
Gen., General.	Phil., Philosophy.
Geog., Geographical.	Photog., Photography.
Geol., Geology.	Phys., Physics.
Held., Helderberg.	Piscol., Piscology.
Hemipt., Hemiptera.	Pres., President.
Herpetol., Herpetology.	Prof., Professor.
Histol., Histology.	Psychol., Psychology.
Hist., History.	Sec., Secretary.
Hort., Horticulture.	Sci., Science.
Hymenopt., Hymenoptera.	Sil., Silurian.
Ichth., Ichthology.	So., Southern.
Inorg., Inorganic.	Soc., Society.
Inst., Institute.	Spec., Species.
Invert., Invertebrates.	Spec., Specimens or specialty..
L., Lower.	Strat., Stratigraphical.
L. & F. W., Land and Fresh Water.	Surv., Survey.
Lepid., Lepidoptera.	Syst., Systematic.
Lithol., Lithology.	Tax., Taxidermy.
M., Marine.	Tech., Technical, Technology.
Mam., Mammalogy.	U., Upper.
Math., Mathematics.	Univ., University.
M. E., Mining Engineer.	Vasc., Vascular.
Med., Medical.	Veg., Vegetable.
Metall., Metallurgy.	Vert., Vertebrates.
	Zool., Zoology.

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- Grant, Abel Joel, Ph.D., Curtis High School, New Brighton, N. J. *Botany and Nature study*. C. Mosses. Ex. Publishes several books on No. American Mosses.
- Gruber, C. L., A.M., Prof. State Normal Sch., Kutztown, Pa.
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- Hall, Edwin H., 30 Langdon St., Cambridge, Mass. *Phys.*
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- Harding, H. A., Prof. of Dairy Bacteria, Univ. of Ill., Champaign, Ill. *Bacteria*.
- Hardman, John E., S.B., M.E., 660 Sherbrooke St., West Montreal Can. *Phys. Geol., Min., Lithol., Metall.* C.
- Hardy, H. T., M.D., Kaneville, Ill. *Orn.*
- Hardy, Isaac B., 327 E. Victoria St., Santa Barbara, Calif. *Molluscs*. C. Ex.

- Hardy, Walter M., 159 Wilson St., Brewer, Maine. *Mammals*.
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Desires local list of plants used in landscape work.
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- Hodge, Frederick W., Eth. in charge, Bureau of Am. Eth., Washington, D. C. *Eth., Arch.*
- Hodge, James M., Big Stone Gap, Va. *Geol.*
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- Hodgson, Fred T., F.R., I.A.C., Collingwood, Ont., Canada.
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- Leuschner, A. O., A.B., Ph.D., Sc.D., (Hon. Univ. of Pittsburg, 1900, U. of Mich. 1913). F.R.A.S., Member Nat. Acad. Sci. etc. Director of Student's Obs'y. Prof. of Astronomy, Univ. of Calif., Berkeley, Calif.
- Leussler, R. A., 1137 So. 31st St., Omaha, Nebr. *North American Lepid.* C. and Ex. No. Amer. species for other No. Amer. species not in my collection.
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Medica and Therapeutics, in Department of Dentistry,
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keley, Calif. Instructor in Embryology in Univ. of Calif.
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- Lyon, Marcus W., Jr., M.D., Ph.D., 48-V. St., N. W., Washington, D.C. *Mammals, Birds.*
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- Stone, Witmer, M.A., Curator, Acad. of Nat. Sciences, Philadelphia, Pa. Editor of "The Auk." *Mam., Orn., with special reference to Geog. Dist.* C.

- Stoner, Emerson A., Greenwood Park Sta., Des Moines, Iowa. *Orn.* C. of mounted birds.
- Storrer, James, Instructor in Geology, Cornell Univ., Ithaca, N.Y. *Fossils in General* C. of fossils. Ex.
- Stose, Geo. W., U. S. Geol. Survey, Washington, D.C. *Geol., Min., Crystall.* C.
- Stowell, Willard A., 140 Kent St., Trenton, N.J. *Bot., Ferns.* C. Ex. Desires to ex. Bot. specimens of Eastern U. S. for ferns of Eastern and Western Hemispheres and publications relating to the same; also wishes local lists of ferns of N. A., especially from Mexico, Central America and West Indies.
- Street, John Phillips, M.S., Drawer No. 1, New Haven, Conn. *Lepid., Coleopt.* C. of 2000 insects.
- Strong, Dr. Ruben Myron, Univ. of Chicago, Chicago, Ill. *Zool.*
- Struthers, Joseph, Ph.B., Ph.D., Amer. Inst. Mining Engineers, 29 West 39th St., New York, N.Y. *Min., Crystall., Inorg. Chem., Metall.*
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- Sturgis, William C., A.M., Ph.D., Dean, Colo. School of Forestry, Colorado Springs, Colo. *Myxomycetes.* C. Ex.
- Sudworth, George B., A.B., Dendrologist, Forest Service, U.S. Dept. of Agric., Washington, D.C.
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- Surface, H. A., D.Sc., Pa. State Zoologist, Harrisburg, Pa. *Palæo., Zool., Con., Ent., Orn., Ichth., Mam.* Pa. insects for exchange.

- Swain, John Merton, Farmington, Maine. *Orn., Ool.* C. birds; nests and eggs. Pres. Maine Orn. Society.
- Swain, Joseph, M.S., LL.D., Pres. Swathmore Coll., Swathmore, Pa.
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- Swezey, G. D., A.M., Univ. of Neb., Lincoln, Neb. *Meteo., Ast.* C. Ex.
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- Taylor, Wm. A., Pomologist, U. S. Dept. of Agric., Washington, D.C. *Pomology, Bot., Hort.*
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- Todd, W. E. Clyde, Carnegie Mus., Pittsburgh, Pa. *Geog. Dist., Orn.*
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- Trombley, Jerome, Box 54, Petersburg, Mich. *Eggs and Shells.*
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- d* True, Frederick W., Asst. Sec. in charge of Libr. and Exchanges, Smithsonian Institution. *Zool. Parks, Mus. and Libr's,* Washington, D.C. *Zool., Mammals, Cetaceans.*
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- Tyrrrell, J. B., M.A., B.Sc., F.R.S.C., F.G.S., Consulting Geolo-

- gist and Mining Engineer, 534 Confederation Life Bldg., Toronto, Canada. *Geology of the Precious Metals*.
- Tyson, James, M.D., 1506 Spruce St., Philadelphia, Pa. *Medicine and Pathol.*
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- Uhler, Philip R., LL.D., M.S.A., Pres. Md. Acad. Sciences, 254 W. Hoffman St., Baltimore, Md. *Geol. of U. S. and Antilles, Hemipt., Aboriginal Arch.* C. Hemipt. Ex. W. India Hemipt.
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- Upham, Warren, Secretary Minn. Hist. Soc., St. Paul, Minn. *Glacial and Recent Geol.*
- Upton, Prof. Winslow, A.M., Sc.D., Brown Univ., Providence, R.I. *Ast., Meteo.*
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ing and Migration.*
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- Whitaker, Wm., F.R.S., 3 Campden Road, Croydon. *Geol., Water Supply.*
- White, Henry T., 2 Reedville, Oxtou, Scotland.
- White, James W., F.L.S., Warnham, Woodland Road, Clifton, Bristol. *Phan. Bot.*
- Whymper, R., A.C.G.I., F.C.S., F.L.S., Delton Hill, Surrey, England. C. English wild orchids.
- Wilkinson, William Arthur, F.Z.S., M.B.O.U., Dumcrieff, Tudor Hill, Sutton Coldfield, Birmingham. *Zool., Orn.* C. of birds' eggs.
- Wilkinson, William Henry, F.L.S., Dumcrieff, Tudor Hill, Sutton, Coldfield, Birmingham. *Bot.: Lichens.*
- Willacy, Rev. T. R., B.A., F.G.S., 3 Arlington St., Leamington, York. *Palæo., Geol., Phys., Elect., Meteo., Gen. Biol., Philol., Ent.*
- Williams, Fred N., F.L.S., Certifying Factory Surgeon for West Middlesex, 181 High St., Brentford, Middlesex. *Brit. Flora, Taxonomy.*
- Williams, Griffith J., F.G.S., H.M. Senior Inspector of Metalliferous Mines for North Wales, etc., Coed Menai, Bangor, North Wales. *Geol., Palæo., Bot.*
- Williams, J. Leon, E.D.S., DD.S., Hanover Sq., London. *Dent. Histol., Pathol., Palæo.* Fellow of the Royal Inst. of Anthropology.
- Williams, J. Michael, 31 Grove Park, Liverpool, England.
- Williams, C. Collingwood, B.Sc., F.I.C., Beechfield, Roby, Eng.
- Williamson, Wm., F.R.S.E., 9 Plewland Terrace, Edinburgh, Scotland. *Hydracarina (fresh water).*
- Wills, L. J., Geol. Survey Museum, 28 Jermyn St., London, S.W., England. *Geol., Palæobotany.*
- Wilson, Albert, F.L.S., Calder Mount, Garstang, Lancashire, England. *Mosses and lichens.*

- Wilson, Gregg, M.A., Ph.D., D.Sc., Prof. of Zool., Belfast, Ireland. *Zool., Ichth.*
- Wilson, Guy R. S., Down Lodge, Epsom, Surrey, England. *Butterflies.*
- Wilson, M., D.Sc., F.L.S., Lecturer in Mycology, Edinburgh University, Royal Botanic Garden, Edinburgh, Scotland. *Mycology, Cytology.*
- Wilson, Scott B., F.Z.S., F.R.G.S., M.B.O.U., M. Tapen Soc., Heatherbank, Weybridge Heath, Surrey. *Orn., espec. Hawaiian Islands.*
- Wilson, T. Stacey, B.Sc., M.D., 27 Wheeley's Road, Edgbaston, Birmingham. *Geol.*
- Windle, Sir Bertram, C.A., M.A., M.D., F.R.S., F.S.A., D.Sc., LL.D., Pres. and Prof. of Arch., Univ. College, Cork. *Anat., Anth. Ex. prehist. implements.*
- Winn, Wm. N., Royal Bot. Gardens, Kew. *Bot.*
- Winstanley, George H., H. M. Inspector of Tech. Schools, Mill-houses, Sheffield. *Geol., Mining.*
- Winter, W. P., B.Sc., (Lond.), Hope View, Moorhead, Shipley, Yorks. *Arachnida and Bot. Ex. Spiders.*
- Winwood, Rev. H. H., M.A., F.G.S., 11 Cavendish Crescent, Bath. *Geology.*
- Witherby, H. F., 3 Cannon Place, Hampstead, London. *Orn.*
- Wooley-Dod, Major A. H., In Care Messers Cox & Co., 16 Charing Cross, London. *Bot. esp. British Roses.*
- Wood, John Henry, M.B., Tarrington, Ledbury, Hereford. *Lepid. and Dipt. C.*
- Wood, Norman W., 147 Kensington, Liverpool, England.
- Wood-Martin, Col. W. G., A.D.C. to King George V, M.R.I.A., (Cleveragh) Sligo, Ireland. *Elder Faiths of Ireland, Pagan Ireland. Lake Dwellings of Ireland, History of Sligo, 3 vols. Rude Stone Monuments of Ireland. (Co. Sligo and the Island of Achill.) Sligo and Kenniskilleners.*
- Woodruffe-Peacock, Rev. E. Adrian, F.L.S., F.G.S., F.E.S., M.C.S., etc., Cadney Vicarage, Brigg, Lincolnshire. *Bot., Zool., Geol., (Soils).*
- Woods, Henry, M.A., F.G.S., Lect. in Palæozool. in the Univ. of Cambridge, Sedgwick Mus., Cambridge. *Invert. Palæo.*
- Woodward, Bernard Barham, F.L.S., L. 4 Longfield Road, Ealing, London, W. Asst.-in-charge, General Library, Nat. Hist. Museum. *Non Marine Moll., esp. British, Recent and Fossil. C. Ex.*
- Woodward, Horace B., F.R.S., F.G.S., late Geological Survey of England, 85 Coombe Rd., Corydon. *English Geol.*
- Woolacott, David, S. Sc., F.G.S., Armstrong College, Newcastle. *Geol. and Geog.*
- Worsdell, Wilson Crosfield, F.L.S., Hon. F.R.H.S., 12 Priory

- Rd., Cheswick, London, W., England. *Plant Abnormalities.*
 Wright, W. B., Geol. Surv. of Ireland, 14 Hume St., Dublin.
Geol.
 Yerbury, J. W., Lieut. Colonel, Army and Navy Club, Pall Mall,
 S.W. *Orn., Ent.*

GUATEMALA.

- Rodriguez, Juan J. L., 4 A Ave., Sur. 7, Guatemala. *Zool., Gen. Biol., Emb., Anat., Anth., Arch., Eth., Ethnog., Philol., Vert., Mammals, Orn., Ool., Herpetol., Ichth., Tax., Osteol., Myol., Histol., Articulates, Ent., Hymenopt., Lepid., Invert. C.*

HONDURAS.

- Cambell, Eugene John Ferron, Belize, British Honduras.
Botany.

MEXICO.

- Diaz de Leon, Dr. Jesus, Director del Museo Nacional de Historia Natural, Encino, 27, Mexico.
 Ferrari, Perez Fernando, Jefe del Departamento de Exploracion, Biological del Territorio, Nacional de la Republica Mexicana, Tacubaya, D.F. *Bot., Zool.*
 McDowell, J. A., Collector of Mexican Flora, Apartado 167, Mexico City, Mexico. *Cacti and Orchids.*
 Wilson, H. G., Ensenada, Lower California, Mexico-via-San Diego, Calif. *Birds, Eggs and smaller Mammals.*

CANAL ZONE.

- Johnson, Harry B., Ancon, Canal Zone. *Orn., C. of Birds.*

ANTIGUA.

- Jackson, Thomas, Curator.

BARBADOS.

- Ballou, H. A., M.Sc., Entomologist, Imperial Dept. Agric.
 Bovell, J. R., I.S.O., F.L.S., F.C.S., I.P., Supt. of Agric., Barbados, B. W. I. *Bot., Chem., Ent.*
 d'Albuquerque, J. P., M. A. Canatb., F.I.C., F.C.S., London and Berlin, Island Prof. of Chem. and Agric. Sci., Bridgetown.
Chem.

Nowell, W., Asst. Supt., Dept. of Agric., Barbados.
 Watts, Francis, C.M.G., D.Sc., F.I.C., F.C.S., Imperial Commissioner of Agriculture for the West Indies. *Geol., Chem., Mic.*

CUBA.

Brooks, Theodore, B.A., F.R.G.S., F.R.M.S., British Vice-Consul, Guantanamo, Cuba. *Ent., Mic. C. Lepid. Ex.*
 Ramsden, Charles T., Ph.B., C.E., Santa Lucia Alto, No. 9, Santiago. *Ent., Orn., Ool., Conchology, Mam. C. Ex.*
 Interested in Cuban forms only, or such migrating species (Orn.) as occur in Cuba during migrations.

DANISH WEST INDIES.

Smith, Longfield, B.Sc., Ph.D., Dir. of Agric., St. Croix, Danish West Indies. *Tropical Economic Plants.*

DOMINICA.

Agar, E. A., La Haut, Dominica. *Ent.*
 Jarvis, P. W., Colonial Bank, Dominica. *Marine Biology.*
 Jones, G. A., Asst. Curator, Botanical Gardens.
 Jones, Joseph, Supt. of Agric. and Cur. Bot. Station. *Bot.*
 Nichols, H. A., Alford, C.M.G., M.D., C.M., M.R.C.S., F.L.S., C.M.Z.S., Kingsland House, Dominica. *Bot., W. I. Bibliog., Zool. C. Ex.*

FALKLAND ISLANDS.

Bennett, Arthur George, In Care H. M. Customs, Port Stanley, Falkland Islands, S. America. *Orn., Ool., Con. C. General, Falkland Is. and Southern Dependencies.* Interested in all Fauna of the Islands, land and marine. Have some duplicates at times.
 Cobb, A. F., B.A., (oxon.) Author of *Wild Life in Falklands, etc. General Nat. Hist. and Photographs of same, especially Birds, Eggs and Shells.* Bleaker Island, Falkland Islands, South America.
 Falkland Islands Museum. A general collection of Falkland Is. Fauna and Flora, not yet complete, but the most complete general F. I. collection in existence. Many new species of birds, fossils, etc., and a general mus. collection.

GRENADA.

Auchinleck, Gilbert, B.Sc., F.C.S., Supt. of Agriculture, Gov't Agric. Dept.
 Branch, George F., Agric. Instructor. *Bot.*

JAMAICA.

- Barclay, John, Sec. Agric. Society.
 Campbell, John, Asst. Supt., Castleton Gardens, Castleton. *Hort.*
 Carmody, Prof. P., F.I.C., F.C.S., Dir., Dept. of Agriculture.
 Collens, A. E., F.C.S., Asst. Analyst.
 Cousins, Hon. H. H., M.A., (oxon.), F.C.S., Dir. of Agric. and Island Chemist.
 Cox, The Hon. H. E., The Ramble, Claremont, Jamaica, W. Indies.
 Cradwick, William, Dept. of Agriculture, Jamaica, Heghgate, P. O. *Diseases of Plants, (Fungoid)*. Desires to exchange photographs of plants showing effects of diseases.
 De Verteuil, J., F.C.S., Asst. Analyst.
 Hall, Maxwell, M.A., F.R.A.S., F.R. Meteo. Soc., Jamaica. *Meteo., Ast., Seismology.*
 Harris, Wm., F.L.S., Supt. Public Gardens, Kingston, Jamaica. *Bot: Econ. Plants, Flora of Jamaica.*
 Henderson, G. C., M.D., Kingston. *Mic.*
 Institute of Jamaica, Kingston. Founded 1879. Museum and Library. Frank Cundall, Sec'y and Librarian.
 Martinez, R. S., Sugar Chemist.
 Scott, H. H., M.R.C.S., L.R.C.P., Bacteriologist and Fermentation Chemist.
 Shrewsbury, H. S., F.I.C., Asst. Analyst.
 Wright, C. H., B.A., (Cantab.), F.I.C., F.C.S., Asst. Analyst.
 Wortley, E. J., F.C.S., Lecturer in Agricultural Science.

LEEWARD ISLANDS.

- Tempany, Harold A., B.Sc., (Lond.), F.I.C., F.C.S., Govt. Chemist and Supt. of Agric.
 Weil, V. M., B.Sc., (Lond.), Asst. Chemist, Leeward Islands.

MONTSERRAT.

- Robson, W., Curator.

NICARAGUA.

- Anderson, Wm. A., Medical Officer, Babilonia Gold Mines, La Libertad, Chontales, Nicaragua.

PORTO RICO.

- Crawley, Josiah Thomas, A.B., Dir. of the Exper. Station of the Porto Rico Sugar Growers Assoc., Rio Piedras, P. R. *Agric. of Sugar Cane.*
 Johnston, John Robert, Plant Pathologist, Estacion Experimental,

Rio Piedras, P. R. *Pathology of Sugar Cane and Coconut of West Indian Flora*. C. of Venezuelan and Porto Rican plants. Sugar Cane Fungi. Ex. sugar cane fungi from other parts of the world.

Jones, Thomas Henry, Ent. in charge, Estacion Experimental, Rio Piedras, Porto Rico. *Ent.*

Junghanns, Robert L., Bayamon. *Hymen., esp. Apina*. C. Ex. Smyth, Eugene G., Asst. Ent., Board of Comm. of Agric. of Porto Rico, South Coast Laboratory, Santa Rita, Ensenada, P. R. *Cicindelidæ and Buprestidæ*. C. Ex. of Colopt. of Arizona, Texas and Porto Rico.

van Leenhoff, J. W., Coffee Expert, Ponce, Porto Rico.

ST. KITT'S.

Branch, W. J., M.D., Basseterre. *Moll.* St. Kitt's, Nevis, W.I. Shepherd, F. R., Agric. Superintendent, St. Kitt's-Nevis. *Bot.*

ST. LUCIA.

Brooks, A. J., Asst. Supt. Agric. Dept., St. Lucia.

Hudson, The Hon. George S., Errard Estate, St. Lucia, W. Indies. *Tropical Arboriculture, (economic.)*

Moore, John Chisnal, Agricultural Supt., St. Lucia, W. Indies.

ST. VINCENT.

Birkenshaw, F., Agric. Instructor, Agric. Dept., St. Vincent.

Sands, W. N., Agricultural Superintendent. *Bot.*

Stoute, C. P., D. V. S., Veterinary Surgeon, Agric. Dept., St. Vincent.

TOBAGO.

Broadway, W. E., Curator, Bot. Station, Tobago, West Indies; (formerly of Royal Bot. Gar., Kew.) *Gen. Bot.*

TRINIDAD.

Freeman, Wm. G., B.Sc., A.R.C.S., Lond., F.L.S., Asst. Dir. of Agric. and Gov't Bot., Trinidad and Tobago, Royal Botanic Gardens, Trinidad.

Guppy, P. L., F.E.S., Assistant Entomologist.

Guppy, R. J., Lechmere, C.M.Z.S., Kinnersly, cor. Queenspark, West, Port of Spain. *Geol., Biol., Mythology, Astronomy*. C. of shells and crustacea, also echinoderms and fossils.

Rorer, James Birch, A.M., Mycologist, Board of Agric., Port-of-Spain, Trinidad, B. W. I. *Diseases of Tropical Plants*.

- Urich, F. W., C.M.Z.S., F.E.S., 107 Frederick St., Port of Spain. *Econ. Ent.*
 Wassen, Cyril Neale, R.H.S.C., late of the Royal Gardens, Kew,
 Dabadie, Trinidad, B. W. I. C. of palms and dracænas.

VIRGIN ISLANDS.

- Fishlock, W. C., Curator, Dept. of Agric.

ARGENTINE REPUBLIC.

- Arata, Dr. Pedro N., Prof. Nonoravia de la Universidad; Presidente del Concep Nacional de Educacion, Buenos Ayres. Calle Rivadavia, 2261.
 Arribalzaga, Enrique, Lynch, Resistencia, (chaco), Rep. Argentina. *Ent., Orn.*
 Brethes, Jean, Entomologist at National Museum, Peru, 208. Buenos Ayres (Rep. Argentina). *Coleopt., Dipt., Hymen.*
 Bruch, Carlos, Museo de La Plata. *Zool., Ent., Coleopt.* C. Ex.
 Carette, Dr. Eduardo, Buenos Ayres, Avenida de Mayo 1375. *Parasites.*
 Doello-Juardo, Martin, Prof. de Zool. del Institute Nac. del Profesorado Secundario de Buenos Ayres, Peru 222. *Zool.*
 Hicken, Dr. Cristobal M., Inspector de Ensenanza Secundaria y Catedrat de Bot., Miner. y Geolog. de la Universidad de Buenos Ayres. Prov. de Buenos Ayres. "Darwinion," San Martin. *Ferns.* C. Ex.
 Holmberg, Dr. Eduardo L., Insp. de Ensenanza Secundaria y Catedratico de Bot. de la Univ. de Buenos Ayres. Calle Cerrito 858. *Arach., Hymen., Ichth., Moll.* C.
 Kurtz, Dr. Frederico, Catedratico de Bot. de la Univ. de Cordoba. *Bot., Recent and Fossil.* C. Ex. especially fossil plants.
 Lehmann-Nitsche, Robert, M.D., Ph.D., Museo de La Plata. *Anth., Arch., Prehist. Ethnol.*
 Lillo, Dr. Mignel, Jefe de la Oficina Quimica de Tucuman, Tucuman. *Bot., Dist.* C.
 Marelli, Dr. Carlos A., Natur. de la Sec. de Zool. Aplic. del Min. Nac. de Agric., La Plata, 35 esq. 58 *Anthrop., Vermes.*
 Nielsen, Juan, Prof. supl. de Zool. de la Univ. de Buenos Ayres, Ecuador 879. *Physiol.*
 Pastore, Franco, Geologo de la Direuion de Minas y Geol. del Ministerio Nac. de Agric., Buenos Ayres, Peru 222. *Petrog.*

- Rua, J. M., de la, Prof. supl. de Zool. de la Univ. de Buenos Ayres, Oro 2377. *Protozoa*.
- Scala, Augusto C., Prof. de Bot. de la Univ. de La Plata. Buenos Ayres, Tucuman 657. *Histolog*.

PERU.

- Townsend, Charles, H. T., Government Entomologist and Director of Entomological Stations, Casilla 1237, Lima, Peru, *S. America Muscoid Flies, Medical Ent. and Cotton Plagues*.

BRAZIL.

- da Silveira, Alvaro Astolpho, Engineer, Bello Florizente, Minas Geraes, Brazil. *Bot. C. of Eriocaulaceæ*.
- Diogo, Julio Cesar, Substitute de Botanica do Museu Nacional do Rio de Janeiro, Brazil. *Specialty Compositæ*.
- Jhering, Hermann von, Director Mus. Paulista, Suo Paulo. Caixa do Correios. *Moll., Ent., Mammals*.
- Lofgren, Alberto, Ph.D., F.L.S., Sao Paulo, Rua Veridiana 71. *Bot., Algology, F. W. Algæ. C. Ex.*
- Ludernwalt, Hermann, Entomologist, Museu Paulista, Sae Paulo, Brazil.
- Moriera, Carlos, Chefe do Laboratorio de Entomologia Agricola do Museo Nacional, Quinta da Boa Vista, S. Christao, Rio de Janeiro. *Ent., Crust., Worms*.
- Ribeiro, Alipio de Miranda, Inspector da Pesea, substitute da Sec. da Zool., do Museo Nacional, Guinta da Boa Vista, S. Christorao, Rio de Janeiro. *Brazilian Mammals, Birds, Reptilia, and Fishes*.
- von Thering, Dr. Rodolphs, Custos of the Museo Paulista, S. Paulo, Brazil. *Brazilian Fauna*.
- Willis, John Christopher, M.A., Sc.D., (Cambridge, Eng.), Hon. S. D. Harvard, Dir. of the Bot. Garden, Rio de Janeiro. *Evolution and Geographical Distribution*.

CHILI.

- Porter, Prof. Charles E., Prof. of Zoology and Economic Entomology at Agric. Coll. of Santiago; Dir. of the work "Fauna de Chili," and the journal "Revista Chilena de Historia Natural." Address: Casilla 2974, Santiago, (Chili) *Economic Entomology, General Zoology, Crust., Microscopy, Pentatomidæ, Acari, Chilian Zool. Literature*.
- Richter, Max Clemens, B.S., (Univ. of Calif.), El Monto, Provincia de Santiago, Chili. *Apiculture. C. of the different*

varieties of honey bees and publications pertaining to bee-keeping.

Wolffsohn, John A., Casilla 672, Valparaiso, (Chili). *Mammals, especially Chilian, also Habits of Bees.*

BRITISH GUIANA.

Bancroft, C. K., B.A., Asst. Dir. and Gov't Bot., Dept. of Sci. and Agric., British Guiana.

Bodkin, G. E., B.A., (Cantab.), Economic Biologist, Dept. of Sci. and Agric., British Guiana.

Franks, Godfrey Firth, M.A., F.G.S., Queen's Coll., Georgetown. *Geol.*

Harrison, Prof. J. B., C.M.G., M.A., F.I.C., F.C.S., F.G.S.A., Dir. and Gov't Analyst and Geologist, Dept. Agric.

Leechman, A., F.C.S., Science Lecturer, Dept. of Sci. and Agric., British Guiana.

Raleigh, J. A., V.S., Can., M.R.S.I., Eng., Veterinary Surgeon, Dept. of Sci. and Agric., British Guiana.

Rodway, James, F.L.S., Cur. of Museum, Georgetown. *Ent., Plant Pests.* Want literature on plant pests.

Waby, John F., Head Gardener, Bot. Gardens, Georgetown.

Williams, John, F.C.S., First Ass't Analyst, Government Lab., Georgetown, Demerara. *Analyt. Chem., Photog., Mic.*

NEW SOUTH WALES.

Australian Museum, R. Etheridge, Jr., Cur., S. Sinclair, Sec. Will ex. specimens in *Zool., Palæo., Geol., and Ethnol.*

Baker, R. T., F.L.S., Curator, Tech. Mus., Ultimo, Sydney. *Bot.*

Brown, Rev. George, D.D., Gordon, N. S. W., Australia; Author of "George Brown, D.D., Pioneer Missionary and Explorer," and of "Melaneseans and Polynesians, Their Life and History Described and Compared."

Brown, W., 7 Norton St., Leichhardt. *Orn.*

Butler, Joseph E., Naturalist-Taxidermist, 6 Rochester St., Camperdown, New South Wales. *Birds of all Countries.* C. of Australian Birds.

Cleland, John Burton, Principal Microbiologist, Dept. of Public Health, Sydney, New South Wales. *Parasitic Helminths, Basidiomycetas Fungi.*

Darnell-Smith, George Percy, B.Sc., F.I.C., F.L.S., Biologist, Dept. of Agric., New South Wales. *Vegetable Pathology.*

Dick, James Adams, M.D., Randwick, Sydney. *Mic., Geog. Dist.*

- Grant, Henry S., Collector to the Australian Museum, College St., Sydney, N. S. W., Australia. *Birds and Mammals*.
- Grant, Robert, Taxidermist, Australian Mus., College St., Sydney. *Ornithology*.
- Hamilton, Alexander Greenlaw, Lecturer on Nature Study, Teachers College, Blackfriars, Sydney. *Plants and Insects*. C. Ex.
- Haswell, Prof. Wm. A., Univ., Sydney. *Zool*.
- Hedley, C., Australian Mus., Sydney. *Con.*, *Moll. in general, esp. distribution and Anat. of Land Moll.*
- Helms, Richard, 393 Alfred St., North Sydney, N. S. W., Australia. *Conchology*. *C. shells, insects, coins, postage stamps*. Ex. of shells.
- Hurst, Geo., M.A., M.B., Blackheath, N. S. W. *Orn*.
- Lawson, Prof. A. Anstruther, D.Sc., Dept. of Bot., Univ. of Sydney, Sydney, New South Wales, Australia. *Cytology, Gymnosperms, Marine Alga*.
- Macgilliray, Dr. William David Kerr, Broken Hill, New South Wales, Australia. *Orn.*, *Ool.* C. of Australian Birds' Eggs.
- Maiden, H., Gov't Botanist and Director of the Botanic Gardens, Sydney. *Bot.*, *Hort*.
- Mitchell, John, F. L. S., (N. S. Wales), Principal of Newcastle Technical College, High St., Waratah, New South Wales. *Palæo.*, *Geol.*, *Min.*, *etc.* C. of fossils and min. Ex. or sell. Fossils are chiefly Silurian and Perinocarboniferous.
- Ross, J. Clumies, B.Sc., F.G.S., Technical College, Sydney. *Geol.*, *Bot.*, *Chem*.
- Savidge, Geo., Copmanhurst. *Australian Ool.* C. Ex.
- Sinclair, Southerland, Sec., Australian Mus., Sydney.

VICTORIA.

- Royal Australasian Ornithologists Union Co., Zoological Gardens, Melbourne. Publishes the "Emu" Magazine; Pres., Robert Hall, C.M.Z.S.; Vice-Presidents, A. H. E. Mattingley, C.M.Z.S., Capt. S. A. White, M.B.O.U.; Hon. Sec., F. Erasmus Wilson; Hon. Treas., Z. Gray, L.C.A.; Hon. Press Correspondent, E. Brooke Nicholls; Hon. Librarian, W. H. D. Le Souet, C.M.Z.S.; Hon. Editors "Emu," A. J. Campbell, Col. Mem. B.O.U., and Charles Barrett. Council. Dr. C. S. Ryan, Dr. J. A. Leach, Dr. Geo. Horne, Dr. William Macgillivray, A. F. Basset Hull, C. A. Barnard, Dr. A. M. Morgan, A. W. Milligan.
- Bale, W. M., F.R.M.S., Walpole St., Kew. *Hydrozoa*.
- Chapman, Frederick, A.L.S., National Museum, Melbourne. *Geol.*, (*Palæo.*), and *Mic.*, (*Foraminifera*.)

- Gatliff, John Henry, 31 Normanby Avenue, Northcote, Melbourne Victoria, Australia. *Marine Conchology*. 6000 species. C. Ex.
- Hall, T. S., M.A., The University, Melbourne. *Biol., Geol., Palæo.*
- Hart, Thomas S., M.A., B.G.E., F.G.S., Forests School, Creswick, Victoria. *Geol., Bot.*
- Herman, Hyman, Dept. of Mines, Melbourne. *Geol.*
- Kershaw, J. A., F.E.S., Nat. Mus., Melbourne, Victoria, Australia. *Zool., General.*
- Le Souef, A. Sherbourne, C.M.Z.S., Dir. Zool. Gardens, Sydney. *Econ. Ent. C. Mallophaga*. Ex. spec. of Aust. Mallophaga, Pulicidæ, Ixoidæ.
- Le Souef, Ernest A., Dir. Zool. Gardens, Persh. *Zool., Gen. Biol. C. Ex.*
- Le Souef, W. H. Dudley, C.M.Z.S., M.B.O.U., and Dir. Zool. Gar., Parkville, Melbourne. *Ool., Orn. C. Ool.*
- Love, E. F. J., M.A., D.Sc., Univ., Melbourne, *Physicist.*
- Lyell, G., Gisborne. *Ent., Lepid.*
- Moore, T. F., Osteologist, Nat. Mus., Melbourne. Correspondence invited.
- Morrison, Alexander, 427 Victoria Parade, Melbourne. *Bot. of Western America and Pacific Islands*. C. of West Australian plants, which I desire to exchange for specimens of similar quality.
- Pritchard, G. B., D.Sc., F.G.S., "Talavera," 6 Kooyongkoot Rd., Hawthorn, Victoria. *Geol., Palæo., Conch.*
- Shephard, J., Clark St., South, Melbourne. *Rotifera.*
- Spencer, W. Baldwin, M.A., F.R.S., Prof. Biol., Univ. of Melbourne, Dir. National Mus. Nat. Hist. of Victoria. *Zool., Eth.*
- Sugars, Richard Sillery, Oxford Chambers, Bourke St., Melbourne. *Zool., Cytology., Mic.* C. of Mitosis in plants. Desire to ex. for Mitosis in Animal Cells.
- Sweet, G., F.G.S., "The Close," Brunswick, Melbourne. *Biol., Parasitology.*
- Walcott, Richard H., Technological Mus., Swanton St., Melbourne. *Geol.*
- Wilson, F. Erasmus, R.A.O.U., "Corowa," St. George's Road, Elsterwick, Victoria. *Orn. C. Birds' eggs.* Ex. for Extra Australian species.

QUEENSLAND.

- Dunstay, B. F. G. S., Government Geologist of Queensland. *Geol. Surv., Brisbane. Geol.*
- Hamlyn-Harris, R., D.Sc., F.R.M.S., F.Z.S., F.E.S., Dir. Queensland Mus., Brisbane. *Eth., Zool., Cephalopods, Apiculture.*

- Longman, H. A., Queensland Museum, Brisbane. *Herpetology*.
 Lucas, Dr. Thomas P., Fel. Ent. Soc. of Lond., Fel. Royal Soc. of Queensland; Fel. Linn. Soc., N. S. Wales, etc.
 Vera Papaw Hospital, New Farm, Brisbane, Queensland.
Ent. C. of Australian moths and butterflies. *Ex. specimens*.
 MacGregor, Sir William, G.C.M.G., C.B., etc., Government House, Brisbane. *Anthropology, Educational.* C. of Anthropology, etc.
 Ogilby, J. Douglas, Queensland Museum, Brisbane. *Ichthyology*.
 Ringrose, R. C., Herberton, N. Queensland. *Geol., Min., Con.* C. of min. and shells.
 Shirley, John, D.Sc., Senior Inspector of Schools, Colarnise, New Farm, Brisbane. *Lichens.* C. *Ex.*
 Simmons, Richard, Superintendent Botanic Gardens, Rockhampton. *Hort.*
 Skertchly, Sydney, B. J., F.G.S., M.A.I., "Ashton," Coniida, Queensland, late of H. M. Geol. Survey of England and Queensland, Brisbane. *The Geology and Biology of Australia, and the surrounding area.* Am preparing a monograph. Should be glad of any lists of S. American or Oriental fossil mammalia.
 Soutter, William, Sec. and Mgr., Acclimatization Society's Gardens, Brisbane. *Plant Breeding, Eth.* Fine collection of New Guinea, Australian and South Sea Curios.
 Thomson, Dr. G. P., Hon. F.R.S.G.S., Land Dept., Brisbane. *Geog., Ethnol., Ast.*
 Turner, A. Jefferis, M.D., F.E.S., Wickham Terrace, Brisbane. *Lepid. of Australia.*

SOUTH AUSTRALIA.

- Gill, Walter, F.L.S., F.R.H.S., Conservator of Forests, Woods and Forests Dept. *Adelaide Forests*.
 Lee, P. A. M., South Australian Museum, Adelaide. *Ent.*
 Mellor, J. W., Fulham, near Adelaide. *Ool., Orn. of Australia.* Large collection of both. *Ex.*
 Tepper, J. G. Otto, F.L.S., F.S.Sc., etc., Entomologist and Bot., Norwood, S. Australia, or care of Messers E. S. Wigg & Son, Booksellers, Adelaide and London. *Geol., Bot., Ent., Orthopt.* C. *Ex.* insects in special cases, for the Public Museum only.
 Waite, Edgar R., F.L.S., (London), Director, S. A. National Museum, Adelaide, S. Australia.
 Watson, Archibald, M.D., F.R.C.S., Prof. Anat., Adelaide.
 Zietz, F. R., R.A.O.U., S. A. Museum, Adelaide. *Ornithologist.*

WESTERN AUSTRALIA.

- Alexander, Wilfred B., M.A., Zool. Asst. in the W. A. Museum and Art Gallery, Perth, Western Australia.
- Browne, Maurice A., Hon. Sec., Nat. Hist. and Science Soc. of Western Australia. "West Australian" Chambers, Perth, W. A. *All branches of Science*. C. of native flora. Ex. by arrangement.
- Campbell, W. D., Assoc. M. Inst. C. E., Richardson St., South Perth. *Geol.*
- Dakin, Prof. W. J., D.Sc., The Univ. of Western Australia, Perth, W. A. *Biol.*
- Giles, H. M., Zool. Gardens, Perth, W. A. *Biol., Ent.*
- Glauert, Ludwig, F.G.S., Western Australian Museum, Perth. *Geol., Palæo., Eth., Min., special subjects Carboniferous and Permian Carboniferous Palæo., Fossil Marsupials.*
- Hancock, Wm. J., M. Inst. C. E., M. I. E. E., Gov't Elec. Engineer, P. W. Dept., Perth. *Chem., Physics, Elec., Ast.*
- Jackson, L. T. C., Geol. Survey Office, Perth, W. Australia. *Geol., Min., Biol.*
- Le Souef, E. A., F.Z.S., B.V.Sc., Dir. Zool. Gardens, South Perth, W. Australia. *Zool., Garden Planning.*
- Maitland, A. Gibb, Gov't Geol., Perth. *Geol., Palæo., Min., Petrog., Econ. Geol.*
- Newman, L. J., Agric. Dept., Perth, W. A. *Ent.*
- Simpson, E. S., B.E., F.C.S., Geol. Surv. Lab., Perth. *Min., Meteorites, Tektites*. C. of Minerals.
- Stoward, F., D.Sc., Agric. Dept., Perth, W. A. *Biol.*
- Wakefield, F. W., Agricultural Dept., Perth, W. A. *Biol.*
- Watkins, Arthur Octavius, Assoc. R.S.M., F.G.S., Royal Mint, Perth. *Geol., Min.* C. Ex. Min.
- Woodward, Bernard Henry, C.M.Z.S., F.G.S., Dir. of the Western Aust. Mus. and Art Gallery, Perth.
- Woodward, Harry Page, J.P., F.G.S., A.M. Inst. C. E., Asst. Gov't Geol., Perth. *Field Geol. and Mining.*

NEW ZEALAND.

- Aston, Bernard Cracroft, F. I. C., New Zealand Gov't Agricultural Chemist, Wellington, N. Z.
- Bartrum, John A., M.Sc., A.O.S.M., Asst. Geologist, New Zealand Geological Survey, Wellington.
- Benham, Prof. W. B., D.Sc., F.R.S., Otago Univ. Mus., Dunedin. *Oligochaeta.*
- Brittin, Guy F. J. M., Derwent St., Oamaru, New Zealand. *Coccidæ, Aphidæ, Psyllidæ, Aleurodizæ.*
- Brown, Maj. T., F.E.S., Mt. Albert, Auckland. Coll.

- Cheeseman, Thos. F., Dir. of Auckland Mus., Auckland. *Bot.: Phæn. and Crypt. Plants, Ferns, Mosses, Geog. Dist.* C. Ex.
- Chilton, Charles, M. A., D.Sc., LL.D., Prof. of Biol., Canterbury College, Christchurch. *Biol., Crustacea, esp. Isopoda and Amphipoda.* C. Ex.
- Cockayne, Alfred, Agric. Dept., Wellington. *Econ. Ent.*
- Cockayne, L., Ph.D., F.L.S., F.R.S., 181 Linwood Ave., Christchurch. *Botanical Ecology.* C. of N. Z. Flowering plants and ferns.
- Cochrane, Neil D., Mining Engineer, Auckland. *Geol.*
- Colton, C. A., M.Sc., Vict. Coll., Wellington. *Geol.*
- Collier, Rosa, (Dr.), 393 George St., Dunedin. *Zool.*
- Cottrell, A. J., Training College, Auckland. *Zool.*
- Craig, Eric, Tauhinu Pk., Wainoni, Auckland. *Bot.: Ferns.*
- Cross, Miss B., M.A., Girls High School, New Plymouth. *Bot.*
- Cunningham, A., Ure St., Oamaru, N. Z. *Rotifera, Diatomaceæ, Foraminifera, Siphonaptera.*
- Daniel, Peter F., F.G.S., Greymouth. *Geol.*
- Don, Dr. John R., Dunedin. *Geol.*
- Drummond, J., F.Z.S., "Times Co." Christchurch.
- Dutton, Rev. D., F.R.A.S., The Manse, Caversham, Dunedin. *Geol.*
- Farquhar, H., Wellington. *Echin.*
- Foweraker, C., Cant. Coll., Christchurch. *Bot.*
- Fulton, Dr. R. T., Pitt St., Dunedin.
- Gibson, Adam, Supt. Colonial Bot. Garden, Dunedin.
- Goldie, Wm., Ranger, Colonial Bot. Garden, Auckland.
- Gordon, Henry A., Bank of New Zealand Bldgs., Queen St., Auckland. *Geol.*
- Hamilton, Augustus, Dir. of Dominion Museum, Wellington, N. Z. *Ethnog., Moll.*
- Henderson, J., D.Sc., Geol. Survey, Wellington. *Geol.*
- Herries, William H., B.A., Shaftesbury, TeAroha, Auckland. *Geol.*
- Hesse, W., B.A., Cur. Mus., Wanganui.
- Hilgendorf, F. W., M.A., D.Sc., Lincoln Agric. Coll., Christchurch. *Zool., Bot.*
- Hill, Henry, B.A., Napier. *Geol.*
- Hoghen, G., M.A., F.G.S., Educ. Dept., Wellington. *Geol., Seismol.*
- Holloway, Rev. John E., East Oxford, Canterbury, New Zealand. *Lycopodiaceæ.*
- Howes, W. George, F.E.S., Dunedin. *Lepid., Hymenopt.* C. Insects.
- Howlett, W. F., B.A., Tanc., Eketabuna. *Ent.*
- Hudson, G. V., F.E.S., Karori, Wellington. *Ent.*
- Kirk, H. B., M.A., Prof. of Biol., Victoria College, Wellington.

- Kirk, T. W., F.L.S., Agric. Dept., Wellington.
- Laing, Robert M., B.Sc., Boys' High School, Christchurch.
Marine Algae. C.
- Marshall, Patrick, M.A., D.Sc., Prof. Univ. School of Mines,
Dunedin. *Geol., Minerals and Fossils*. C. of Alkaline
rocks.
- McKay, Alex., Gov't Bldgs., Wellington. *Geol.*
- Miller, David, 25 City Road, Roslyn, Dunedin. *Dipt., The Bra-*
chycera.
- Morgan, Percy Gates, M.A., Dir. N. Z. Geol. Survey, Wellington.
Palaeo., Geol., and Econ. Geol.
- Morris, Charles Barham, F.R.M.S., Chemist, Thames St., Oam-
aru, New Zealand. *Hydroids, Rotifera, Foraminifera,*
Diatoms. C. Ex. Microscopic slides.
- Oliver, F. S., Manchester St., Christchurch. *Ent.*
- Murphy, J., F.L.S., Christchurch. *Agric.*
- Oliver, W. B., H.M. Customs, Auckland. *Bot., Zool.*
- Park, James, Prof. of Mining in the Univ. of Otago, Dunedin.
Geol. Author of "Textbook of Geology," "The Geology
of N. Z.," "Theodolite Surveying and Levelling, 3rd edi-
tion," "Textbook of Mining Geology," 3rd edition, "Prac-
tical Assaying," 4th edition, "Cyanide Process of Gold Ex-
traction," 10th edition.
- Petrie, D., Epsom, Auckland. *Bot.*
- Phillip, A. H., Invercargill. *Bot.*
- Pinfold, Rev. James T., M.A., F.G.S., F.R.M.S., Roslyn, Dune-
din. *Geol.* C. Minerals.
- Poppelwell, D. L., Gore. *Bot.*
- Smith, J. Crosby, F.L.S., Invercargill. *Bot.*
- Smith, S. Percy, F.R.G.S., New Plymouth. *Geog., Eth.*
- Smith, W. W., New Plymouth. *Zool.*
- Speight, R., M.Sc., F.G.S., Canterbury Coll., Christchurch.
Geol.
- Stead, E. F., Strowan, Christchurch. *Orn.*
- Suter, Heinr., Hereford St., Christchurch. *Moll.* C. Ex.
- Tannock, D., Supt., Colonial Bot. Gar., Dunedin. *Bot.*
- Tennant, I. S., B.Sc., Training College, Wellington. *Bot.*
- Thomas, Prof. A. P., University College, Auckland. *Biol.,*
Trematodes.
- Thomson, J. Allan, D.Sc., F.G.S., Geol. Survey, Wellington.
- Turner, E. P., Survey Dept., Wellington. *Bot.*
- Uttley, G. H., M.Sc., F.G.S., High School, Oamaru. *Geol.*
- Young, J., Cur. Bot. Gardens, Christchurch.

TASMANIA.

- Atkinson, Edw. Derwent, Sulphur Creek, Tasmania. *Palaeo.,*

- Early Tertiary.* C. and desire to dispose of duplicates.
- Grant, Henry, Barrister, St. Helens, Mine Owner, (Alluvial Tin deposits), Local Meteo., Observer for Australian Commonwealth, Member Agric. Board State Tasmania, Special Contributor, (by appointment) to the Australian Mining Standard of Melbourne, Victoria. Collection of specimens illustrative of the Granite Magma and immediately overlying strata of N. E. Tasmania.
- Hinsby, George Kilner, Pharmaceutical Chemist, Straham. *Bot., Crypt. Plants, Ferns, Orn., Ool., Forestry.* Desire to ex. notes.
- Hinsby, Kilner Baynton, Straham, Tasmania. *Engineering, Elec., Chem. (Notes).*
- May, W. L., Sandford, Tasmania. *Interested in all classes of Mollusca.* C. shells. Ex.
- Royal Society of Tasmania, Hobart, Honorary Secretary, E. L. Piesse.
- Stephens, Thomas, M.A., F.G.S., University Council, Hobart. *Geol., Min.* C. of rocks and fossils.
- Twelvetrees, William H., Gov't Geologist and Chief Inspector Mines, Kismet, Elphin Road, Launceston. *Geol.*

HAWAIIAN ISLANDS.

- Bridwell, J. C., Board of Agric. and For., So. King St., Honolulu, H. I. *Ent., Hymenoptera, Philanthidae, Geog. Distribution, Island Faunas, Forest Insects.* C. Ex.
- Brigham, Wm. T., Dir. Bernice Pauahi Bishop Mus. of Polynesian Eth. and Nat. Hist., Honolulu. *Photog., Anth., Eth., Ethnog.* Ex.
- Forbes, Charles N., (Curator of Bot.), Bishop Museum, Honolulu, H. I. *Bot. and Geol.* The Museum will exchange plants for plants of Pacific Islands only.
- Higgins, J. E., Horticulturist, Hawaii Exper. Sta., Honolulu, Hawaii.
- Hosmer, Ralph Sheldon, Box 207, Honolulu, Hawaii. Supt. of Forestry, Territory of Hawaii. *Forestry.*
- Kelley, Walter Pearson, Ph.D., Chemist, Hawaii Exp't Station, Honolulu. *Chemistry, Soils, Plant Physiology.* C. of my papers. Ex.
- Lyon, Dr. Harold L., Honolulu, H. I. *Bot., Mycology, Tropical Agriculture.*
- MacCaughy, Vaughan, Prof. of Botany, College of Hawaii, Honolulu, Hawaii. *Tropical Botany.* C. plants. Ex.
- Norris, R. S., M.D., Tech. Chemist, Honolulu, H. I.
- Wilcox, Erley Vernon, Dir. U. S. Agric. Exper. Sta., Honolulu, H. I.

PHILIPPINE ISLANDS.

- Banks, Chas. S., Government Entomologist, Manila, P. I. *Hymenoptera, Dipt. C. Ex.*
- Cowles, Rheinart Parker, University of the Philippines, Manila, P. I. *Zoology (Crustacea).*
- Cox, Dr. Alvin Joseph, Act. Director, Bureau of Science, Manila, P. I.
- Day, Artemus Lawrence, Univ. of the Philippines, Manila, P. I. *Zoology, Fishes.*
- Graff, Paul W., Bureau of Science, Manila, P. I. *Botany (Mycology).*
- Griffin, Lawrence E., Univ. of the Philippines, Manila, P. I. *Marine Zoology.*
- Ledyard, Edgar M., B.S.A., Head, Dept. of Ent., College of Agriculture, U. of P., Los Banos, P. I. *Coleoptera. C. Ex. Insects.*
- Light, S. F., Univ. of the Philippines, Manila, P. I. *Zoology (Alcyonaria and Sycphomedusæ).*
- McGregor, R. C., Bureau of Science, Manila, P. I. *Ornithology.*
- Saleeby, Murad M., Chief, Fibre Division, Bureau of Agric., Gov't of the Philippine Islands, Manila, P. I. *Tropical Fibres. C. Ex. Fibres, Fibre plants and seeds.*
- Schultze, W., Bureau of Science, Manila, P. I. *Entomology (Lepidoptera).*
- Seale, Alvin, Bureau of Science, Manila, P. I. *Ichthyology.*
- Vanoverbergh, Father M., Cervantes, Mt. Province, Luzon, P. I. Collect. Will sell Philippine botanical material.
- Walker, E. L., Bureau of Science, Manila, P. I. *Protozoology.*
- Wensel, C. A., Jaro, Leyte, P. I. Collect and sell Philippine botanical material.
- Wharton, Lawrence D., Univ. of the Philippines, Manila, P. I. *Zoology (Annelids).*
- Wileman, A. E., British Consul General, Manila, P. I. *Lepid.*
- Willets, D. G., Bureau of Science, Manila, P. I. *Helminthology.*
- Zimmer, John T., A.M., Asst. Entomologist, Bureau of Agric., Manila, P. I. *Vertebrates and Insects, (Hemiptera-Heteroptera).* C. of Birds and Mammal Skins.

JAVA.

- Boorsma, Dr. W. G., Head Pharm. Lab., Gov't Bot. Garden, *Buitenzorg.*
- Breda de Haan, Dr. J. van, 's Dept. of Agric., Buitenzorg. *Bot.*
- Geerligs, H. C. Prinsen, Dir. of the Holland Branch Sugar Exp. Sta. of Java, Amsterdam, Wanningstraat 17. *Chem.*
- Harreveld, Dr. Ph. van, Director Sugar Exper. Station, Pas-

- oeroean, Java. *Cane culture and Cane maladies*. Ex. cane varieties.
- Jensen, Hjalmar, M.Sc., Director Proepstation voor Vorstenlandsche tabak. Klaten, Java. *Tobacco*.
- Koorders, Dr. S. H., Buitenzorg. *Flora of Java*. *Phanerogams*.)
- Smith, Johannes Jacobus, Asst. Herbarium, Dept. of Agric., Ind. and Commerce, Buitenzorg, Java. *Malayan Flora*, esp. *Arch*.
- Valeton, Dr. Th., Curator of the Herbarium, Bot. Garden, Buitenzorg. *Flora Mal. Arch*.

RUSSIA.

- Clerc, G. O., Pres. de la Soc. ouralienne des Sci. Nat., member corresp. de l'Acad. des Sci. de New York, de Smithsonian Inst., Membre honoraire, actif ou corresp. de plusieurs Societes russes, suisses et francaises, Ekaterinburg, Uralian Soc. of Nat. Sci., Ekaterinburg, Russia. *Phen. Plants, Meteo., Arch*.
- Oshanin, Basil, Correspondent of the Zoological Museum, Zool. Mus., Academy of Sciences, St. Petersburg, Russia. *Hemiptera and Geographical Distribution of Animals*.

TURKEY.

- Porter, Prof. Harvey, Ph.D., Beyrut, Syria. *Arch., Geol. C. of specimens*.
- Post, Bertram Van Dyck, M.D., Prof. of Biology, Robert College, Constantinople, Turkey. *Ent., Bot. C. zoological and botanical*. Ex. insects, esp. lepid.

CEYLON.

- Alexander, K. J., Chief Foreman, Royal Botanic Gardens, Newara, Eliya.
- Duebeig, Christopher, B.A., F.U.A.S., Sec'y Ceylon Agric. Soc., Royal Botanic Gardens, Paradeniga, Ceylon. *Bot*.
- Nock, James Jenman, Curator Hakgala Gardens, Newara, Eliya, Ceylon. *Bot*.
- Tomalin, Herbert Frederick, M. Inst. C.E., Fellow R.I.B.A., F.G.S., Provincial Engineer, Public Works Dept., Central Province, Kandy. *Geol., Ent., and Fish Culture*.

CHINA.

- Tutcher, W. J., F.L.S., Superintendent, Bot. and Forestry Dept., Hong Kong.

INDIAN EMPIRE.

- Anderson, J. W., Asst. Cur., Bot. Gardens, Singapore. *Bot.*
- Annandale, Thomas Nelson, D.Sc., F.A.S.B., etc., Superintendent, Indian Museum, Calcutta, residence, Museum House, Calcutta, India. *Sponges, Reptiles and Cirripede.*
- Barber, Charles A., M.A., Sc.D., (Cantab.), Gov't Sugar Cane Expert, Agric. Coll., Coimbatore, S. India. C. Sugar canes. Ex. for any others in tropical countries.
- Bombay Natural History Society, W. S. Millard, Keeper of the Museum, N. B. Kinnear, Hon'y Sec'y, Bombay.
- Bose, J. C., M.A., (Cantab.), B.Sc., (Lond.), Professor of Physical Science, Presidency College, Calcutta.
- Burkill, Isaac H., M.A., Dir. of Gardens, Straits Settlements, Singapore. *Bot.*
- Butler, Edwin J., M.B., F.L.S., Pusa, Brit. India. *Mycology.*
- Cave, Geo. H., Cur. Lloyd Bot. Garden, Darjeeling, Bengal.
- Datta, Jogendra Nath, B.A., M.B., Analyst, Corporation of Calcutta. *Analysis of Food and Drugs, and the Bacteriology of Water.*
- Davies, H. I., Superintendent of Gov. Gardens, Lucknow, India. *All branches of Hort.*
- Dawkins, C. G. D., Deputy Conservator of Forests, Secretariat Buildings, Rangoon, Burma. (To be forwarded.) *Butterflies and Beetles.*
- Derry, R., Curator, Bot. Gardens, Singapore. *Bot.*
- Ellis, E. V., Deputy Conservator of Forests, Secretariat Buildings, Rangoon, Burma. (To be forwarded.) *Butterflies.*
- Fermor, Lewis L., Supt. Geol. Surv. of India, Geol. Surv. Office, Calcutta. *Geol.*
- Gage, Major, I.M.S., M.A., M.B., B.Sc., F.L.S., Supt. Royal Bot. Garden, Calcutta. *Bot.*
- Government Museum, J. R. Henderson, Superintendent, Madras. C.
- Griessen, A. E. P., (Kaiser-I-Hind.), Botanist, Landscape Architect, Chief Officer, Gov't Hort. Dept., New Delhi, India. *Especially interested in the Acclimatation of suitable Trees for Upper India.*
- Haniff, Mohamed, Overseer, Waterfall Gardens, Penang. *Bot.*
- Hanitsch, Dr. R., Director, Raffles Museum, Singapore. *Zool., Eth. of the Malay Region.*
- Hartless, A. C., Supt. Gov't Bot. Gardens, Saharanpur, U. P., India. *Fruit, and Econ. Plants.* C. Ex.
- Henderson, J. R., M.B., F.L.S., Supt. Gov't Museum, Madras. *Zool.*
- Hooper, David, Economic Botanist to the Botanical Survey of India, Indian Museum, Sudder St., Calcutta. *Plant Industry and Indian Drugs.*

- Iyer, P. A. U., Triplicate, Madras, S. E., British India. *Agric.*
 Kothawala, T. R., Supt. State Gardens, Baroda, India. *Horticulture and Zoology, Ast.* The collections of the latter branch of Science, too, are under the charge of this office. C. of seeds also.
 Krumbiegel, G. H., F.R.H.S., Economic Botanist and Supt. of Gov't Museum, Id Anantasami Row, Curator Gov't Museum, Bangalore.
 Lace, John H., F.L.S., Elmdere, Exmouth, Devon., India. *Bot., Phæn. Plants, India and Burma.*
 Mann, Harold H., D.Sc., Poona Agric. College, Poona, India. *Plant Physiology, Ent.*
 McMahon, Col. Sir. Arthur Henry, G.C.V.O., K.C.I.E., C.S.I. Foreign Secretary, India. *Zool., Geol.*
 Middlemiss, C. S., Geol. Survey Office, Calcutta. *Geol.*
 Moller, F., Rockwood Darjeeling, Bengal. *Butterflies, etc.*
 Murdoch, A. M., Conservator of Forests, Straits Settlements, Kuala, Campur Federated Malay States. *Tropical Forest Flora and Timbers.*
 Mustoe, W. R., Supt. Gov't Agri-Hort. Gardens, Lahore, Punjab. *Hort., Trees and Shrubs.* C. and Ex. seeds.
 Newton, Rev. L. V., S.J., St. Joseph's College, Trichinopoly, India. *Beetles and Butterflies of S. India, and in a general way, in the other Insects of S. India.* C. Ex. beetles and lepid of South India.
 Page, Hastings M., F.I.C., F.G.S., late Prof. of Chem. and Geol. in the Gov. College of Science, Poona via Bombay. *Geol.*
 Proudlock, Robert Lewis, Arboricultural Expert to the Gov't of Bengal, Ramna. *Arbor., Town Planning, Landscape Gardening, Bot., Hort., Fruit Cultivation, Rubber Cultivation, Econ. products generally.*
 Rogers, C. Gilbert, F.C.H., Chief Conservator of Forests, Maymyo, Upper Burma.
 Smeeth, William F., M.A., B.E., D.Sc., Assoc. R.S.M., Geol. Dept. of Mysore, Bangalore. *Geol.*
 Smith, Percy Bosworth, Assoc. R.S.M., Tank Mine, Oorgaum, So. India. *Geol.*

JAPAN.

- Boeddinghaus, C. E., Nagasaki. *Postage Stamps.* Ex.
 Goto, Seitaro, Zool. Inst., Imperial Univ., Tokio. *Zool., Worms, Hydromedusæ, Starfishes.*
 Hanzawa, Jun, Asst. Prof., College of Agric., Tohoku Imp. Univ., Sapporo. *Technical Mycology.*
 Hirase, Y., Kyoto. *L., F. W. and Marine Shells of Japan, Loo Choo, Bonin Is., Formosa and Korea.* Hirase Conchological Museum, Opposite Zoological Gardens, Kyoto. C. Ex. Sell.

- Hori, Shotaro, Imp. Agric. Ex. Station, Nishigahara, Tokio. *Phytopathology, Fungi.*
- Hosawa, Sanji, Zool. Institute, Science College, Imperial Univ., Tokio, Japan. *Zool., Insects.*
- Ijima, I., Ph.D., Prof. Zool., Imperial Univ., Tokio. *Zool.*
- Ikeda, Sakiyiro, Prof. of Zool., Biol. Labor., Zoshikwan, Kagoshiman. *Zool., Amphibia.*
- Ikeno, S., Prof. Bot., Agric. Coll., Imperial Univ., Tokio. *Plant Physiology.*
- Inouye, Dr. Tatsuji, 11 Higashikobaicho, Kanda, Tokio, Japan. *Ophthalmology.*
- Ishikawa, C., Ph.D., (Frieburg, Germany), Rigakuhakushi (Japan), Prof. Zool., Agric. Coll., Imperial Univ., Tokio. *Zool., Cells.*
- Ito, Seiya, Asst. Prof. of Bot., (Phytopathology), Bot. Inst., Tohoku Imp. Univ., Coll. of Agric., Sapporo, Japan.
- Ito, Tokutaro, Sc.D., (Rigakuhakushi), F.L.S., Dir. Ito. Botanical Inst., 4 Hayashicho, Koishikawa, Tokio. *Bot., Gen. Biol., Plants of Eastern Asia, Distribution, Hist. and Bibliog. Publishes 'Icones Plantarum Japonicarum in parts 4to. Colored Plates with description in Eng. and Jap. For particulars, please apply to the Author.*
- Jimbo, Kotori, Prof. Min. Inst., Imperial Univ., Tokyo. *Min.*
- Kasai, Mikio, Central Research Laboratories, Bureau of Railways, Tokio. *Wood destroying Fungi.*
- Kawakami, Takiya, Dir. of the Gov't Museum, and Bot. to the Agric. Exp. Sta., Taihoku, Formosa. *Economic Plants, Phytopathology and Flora of Formosa.*
- Kishinouye, Kamakichi, Prof., College of Agric., Imperial Univ., Tokio. *Marine Zool.*
- Kudo, Vushun, Lecturer on Botany, (Systematic), Bot. Inst., Tohoku Imp. Univ., Sapporo, Japan. *Labiata. C. Ex.*
- Lewis, C. A. E., Kobe, Japan. *Coleoptera. Ex.*
- Miura, Keitaro, Asst. Prof. of Forest Botany, Bot., Inst., Tohoku Imp. Univ., Coll. of Agric., Sapporo, Japan. *C. of fungi, vascular cryptogams and phanerogams. Ex.*
- Miura, Michiya, Phytopathologist to the Agricultural Exp. Station, Kuroishi, Aomori.
- Miyabe, Kingo, S.D., Prof. Bot., and Dir. of Bot. Garden, College of Agric., Tohoku Imp. Univ., Sapporo.
- Miyagi, Tetsuo, Agric. School., Nago, Loochoo. *Fungi, Phanerogams.*
- Miyake, Tsutome, Phytopathologist to the Gov't Sugar Cane Exp. Station, Daimokko, Formosa. *Phytopathology.*
- Namiye, M., Science Coll., Imperial Univ., Tokio. *Zool., Vert.*
- Nishida, Shozo, Asst. of Bot., Bot. Inst., Tohoku Imp. Univ., Coll. of Agric., Sapporo, Japan. *C. Ex. of Equisetum.*

- Nishida, Toji, Phytopathologist to the Agric. Exp. Sta., Kumamoto, Kinsin. *Phytopathology*.
- Ohno, Dr. Naoye, Prof. of Botany, (Physiology), Coll. of Agric., Sapporo, Japan.
- Sawada, Kaneyoshi, Phytopathologist to the Agric. Exp. Sta., Taihoku, Formosa. *Phytopathology*.
- Shirai, Mitsutaro, Rigakuhakushi, Prof. Bot., Agric. Coll., Imp. Univ., Tokio. *Teratology, Phytopathol. and Forest Bot.* Collection of old botanical works.
- Shunjiro, Nozawa, School of Fishery, Tohoku Imperial University, Sapporo, Japan. *Fish*.
- Takahashi, Yoshinao, Botanist to the Sapporo Agric. Exp. Sta., Gov't of Hokkaido. *Phytopathology and Plant Breeding*.
- Terao, Arata, Rigakushi, Zoological Institute, Science College, Tokio Imp. Univ., Tokio, Japan. *Crustacea*.
- The Tokio Zoological Society within the Zoological Institute Science College, Imperial University, Tokio. Publishes a monthly Zoological Magazine (*Dobutsugakuzashi*), in Japanese and Annotations Zoological Japonensis at irregular intervals in English.
- Uchida, Seinosuki, Zool. Institute, Science College, Imperial Univ., Tokio, Japan. *Zool., Orn.*
- Yamada, Gentaro, Prof. of Bot., Agricultural and Dendrological College, Morioka, Japan. *Phytopathology, Phanerogams*.
- Yendo, Prof. Dr. Kichisaburo, Fishery Dept., Coll. of Agric., Tohoku Imp. Univ., Sapporo. *Algæ*.
- Yoshida, Sadawo, Zool. Institute, Science College, Imperial Univ., Tokio, Japan. *Zool., Parasites*.

BRITISH CENTRAL AFRICA.

- Davy, Ernest W., Gov't Agriculturist, Dept. of Agric., Zomba. *Cereals, Legumes, Fruits, Pathological Fungi*. Ex. any of above.
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